VOLUME II APRIL 1, 1976 NUMBER 2

# GOLDUSG

SOCIETY OF NORTH AMERICAN GOLDSMITHS

## president's column

Dear Members:

I would like to correct an error that appeared in Newsletter No. 2 concerning the forward Kurt Matzdorf wrote for the 1975 Metals Invitational catalog. The next to the last paragraph was worded somewhat misleadingly as SNAG did not sponsor the exhibition in any way. Many of the schools participating in this show had metal teachers who are members of SNAG, but that was the only connection. This topic was discussed at the Bromwood Conference, but the members decided SNAG would stop supporting student exhibitions at this time due to its financial circumstances. So the student metals exhibition was put on totally by the schools themselves without any assistance from SNAG. Please forgive me for not informing Mark of this change in the information he received.

The exhibition was enjoyed by many and was especially popular and well attended at the Anderson Gallery at Virginia Commonwealth University. The importance of this exhibition is now documented by the recent request by the Australian government and the United States Information Service who will totally finance an exhibition tour to Melbourne, Australia where it shall be on display for a short period of time. It has been quite some time since the U.S.I.S. has sent a gold and silver exhibition to another country. So, preparations are now underway to ship the exhibit to Australia.

I have been receiving all sorts of letters concerning the newsletter. Many members feel for the first time that they are being informed of news occurring in the metals world and are in closer contact with fellow SNAG members. This feeling has arisen out of the hard work Mark Baldridge and his staff have been doing. But, remember please that the newsletter can only be as effective as the members wish it to be and for continued success, we need YOUR help. Send all information to: Mark Baldridge, Longwood College, Farmville, Virginia, 23901.

At this time I would like to share with you a letter sent to Mark's office from Oppi Untracht. This is just one of the reasons why it is so important that we continue our total effort to improve the standards, quality and creative direction of SNAG.

"Dear Editor:

I enclose a check for $100 in payment of an Associate Membership, and as a small contribution to the publication costs of the SNAG Newsletter which I find very interesting. I hope I shall continue to receive it. This is just a token of my appreciation for the wonderful cooperation I have received from many of your members in response to my requests connected with my forthcoming book, *Jewelry Techniques.*

Oppi Untracht"

By now, you should have received a communication from our office about the payment of dues. It is very important that each member personally take the responsibility to pay their dues to maintain this momentum. The work conferences, films, slides, educational programs, and the exhibition-conference scheduled for Phoenix in 1977 will all need your support. So, take the time today to put your check in the mail and maintain your "member-

(continued on page 2)

(President's Column—continued)

ship in good standing". It has been a long time since you have been asked to pay dues, so take an active and positive role in the organization and pay all back dues.

The newsletter has had requests from individuals and companies about taking advertisements. Advertising is a service that the newsletter can offer and the revenue can help defray the printing and mailing costs. So, if you know of a company who is interested or might be interested, contact Joel Bagnal, SNAG, P.O. Box 247, University Station, Boston, Mass., 02215. Joel can then contact the party concerning sizes, costs, etc.

Our office and Jim Meyer are in close contact with a company that duplicates slides. In the near future, SNAG will have slide kits available to our members for educational purposes. Jim shall make a full report in the newsletter at a later date when the details are finalized.

The conference in Cleveland went well as expected, thanks to Mary Ann Scherr who has done an outstanding job in putting together the various programs. Thanks also go to Mr. and Mrs. Austin Chaney, Jr. I'm sure that all who attended had a good time.

Sincerely,

Bob Ebendorf
Route 1, Box 187X
Highland, N.Y., 12528

# golddust policy

Published bi-monthly by the Society of North American Goldsmiths (SNAG), P.O. Box 308, University Station, Boston, Mass., 02215. Bob Ebendorf, President; Joel Bagnal, Vice President; Arline Fisch, Secretary-Treasurer. Board members are: Hero Kielman, Tom Markusen, George McLean and Mary Ann Scherr. SNAG is a non-profit organization for educational, scientific, and aesthetic purposes, concerned with fostering, encouraging and teaching the subject of metalsmithing. SNAG is registered with the Internal Revenue Service Sec. 501 (c) (3). Single copy $1. Subscription (per year) is automatic with associate membership $10 per year. Address all membership and advertising inquiries to Joel Bagnal, SNAG, P.O. Box 308, University Station, Boston, Mass., 02215. Address unsolicited material to the Editor, SNAG Newsletter, Art Department, Longwood College, Farmville, Va., 23901. Material will be handled with care, but the newsletter assumes no responsibility for it. Since many letters received are of interest to the entire membership, unless specifically stated to the contrary, all received letters risk possible inclusion in the letters-to-the-editor section.

Deadline dates for submitted material shall be 25 days prior to issue date Projected issue dates are: April 1, June 1, August 1, October 1, etc. PLEASE NOTE: if you do not receive your newsletter within 15 days of the issue date (and if you are a member) please immediately write to the editor. This newsletter was initiated through partial funding by a grant from the Crafts Program of the National Endowment for the Arts, to whom we are grateful for its continued support.

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Editor . . . . . Mark Baldridge
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# snag news

CRAFT SHOW AND FAIR, New York City
April 1-4 1976

SNAG will again participate in the Annual International Craft Show and Fair at the New York Coliseum. Booth space has been generously given to us, free of charge, by the New York State Craftsmen (the usual rental fee is $500). The modular system purchased by SNAG for an earlier participation will be used again. The presentation will consist of an automated slide showing of members' work plus copies of past newsletters for distribution to those seriously interested in the organization. (Fisch)

SNAG CONFERENCE 1977

SNAG plans to hold a major conference in the field of goldsmithing to be conducted on the West Coast. The focal point for the conference will be a national competitive exhibition organized by the Phoenix Art Museum in consultation with SNAG to be circulated to several other museums on the West Coast, The Society has held annual conferences since its founding in 1970, two of them in connection with major exhibitions in St. Paul, Minn. and Washington, D.C. It is appropriate at this time that such a combined event take place on the West Coast as a service to the large number of craftspeople working in jewelry and metalsmithing in this region of the country. The conference would bring together all members of the Society and would be open to others.

The conference will concentrate on a dual theme reflecting two areas of major concern to contemporary jewelers and metalsmiths — changing design concepts and technical innovation.

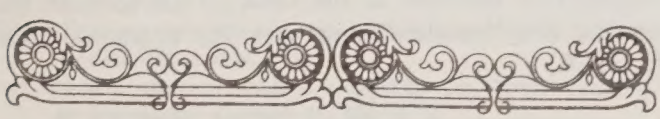
# thoughts

While everyone would agree that beginning metals students should receive several basic technical assignments to insure a well-rounded technical competence, some would violently disagree with continual technical assignments for advanced students. It is probable that no one would argue against the need for a technical pursuit by advanced students, but some would argue as to whom should determine the direction of the pursuit. Should the advanced student determine the area in which he would like to specialize or should the instructor? Everyone would agree that the instructor is much more experienced and has a greater wisdom and broader view of the "metal world". So, it could easily be argued that the instructor could make a much more intelligent decision. On the other hand, it is a well known fact that people work best when they work for themselves. And, if a student spends all of his undergraduate and/or graduate time simply fulfilling the desires of his instructor, will he have the necessary internal motivation to sustain himself once his formal education is terminated?

Some would argue that it is absolutely necessary that each student be knowledgeable and proficient in each technical area and therefore his formal education (due to lack of adequate time) must consist entirely of required techniques.

Others would argue that too many restrictive techniques requirements would philosophically cripple a student's internal motivation and drastically prolong any personal style or sense of direction. They might argue that technical knowledge should arrive only with internal need and not external pressure. They might further argue that the formal education should be a time where each student should be allowed to crystalize their personal direction and this can only be accomplished with massive infusions of freedom.

Whether an all-encompassing program exists is doubtful, of course. Instead, each instructor and student must decide for himself—after much thought and soul-searching!



## SOME REFLECTIONS ON THE ROLE, ACTIVITIES AND DIRECTION OF SNAG

by Bernie Bernstein

In November 1974, Ricka Feeley sent us all a letter inviting us to respond to a series of questions which now serve as the inspiration for the title of this article.

Having invested a few dollars in my SNAG membership, and desiring to put my mouth where my money was, I decided to send her my ideas, which included suggestions about new activities, encouragement to retain certain old ones and complaints about those which I felt could be dropped.

Convinced that my letter had found its reward in that great wastebasket in the sky, I forgot about it until I got my first SNAG Newsletter and my faith was restored; because not only did I suggest to Ricka just such a publication, but some of the other ideas I discussed were also mentioned in the newsletter.

Now, I'm still not convinced that it was my very letter that did the trick, but I am happy that other people came up with the same ideas. The net effect is the same: we have a very, very fine newsletter. I can't emphasize too strongly how crucial this publication is to the strength and cohesion of the organization. It makes possible frequent communication between a hundred or so like-minded people who are scattered over the North American map like six raisins in an 800 pound fruit-cake. It is therefore no surprise that the first target in a revolution is the capture and control of the media of communication.

Now that the medium exists, I would like to contribute my message, which is to share some of the ideas I have come up with regarding what we can do for each other, individually and collectively: IDEA CORNER.

# idea corner

by Bernie Bernstein (edited)

For openers, here is an idea informing the members about academic and personal research and related literature. This is not a unique idea. Every interest-group involved with research has a means of publishing it so people all over the world can build on each other's discoveries instead of inventing the wheel over and over again all by themselves.

SNAG should publish a list of all existing theses and all future theses. The list should include the title of the work, instructor, school, author's name and address, number of pages, brief description (if the title is not adequate), cost, whom to write to when ordering, conditions of sale, etc.

In the case of Master's' theses and other student-written work, there will be a question of whether the instructor acts as the shipper, or insists that each student take care of his own business. If both school address and student address are listed, an interested party will at least be able to write to the instructor or librarian for information in the event that years pass and the student has moved. . . . Hopefully, the seller would charge the buyer only the cost of reproduction and postage. If he wishes, he could charge

nothing. Transactions would be between buyer and seller only, with SNAG serving as the information clearing house, which I think is its proper role in other matters as well. This is based on the fact of life that SNAG does not have a staffed central headquarters and each member should expect to carry his own weight as well as contribute to the welfare of the group. Along these lines, I also think the buyer should be expected to provide a stamped self-addressed envelope when requesting information. . . .In the case of individual craftspeople who write on their own, all one has to do is send the information (not the manuscript) to the newsletter editor. He will automatically put it on the list.

For theses and other student work, copies of which are usually held at the school, each instructor, SNAG member or not, who is willing to plug into the network, will as a matter of routine, inform his students of the existence of the list, gather the necessary information, compile his list, and send it to SNAG. . . .Students can be assigned to prepare a retroactive list of all the past manuscripts on hand.

The tough problem is what to do if the instructor of the moment is deluged with requests for information or Xerox copies now that the author has flown the coop and his address is not listed. I think this can be handled individually by the instructor, depending on his situation, funds, personality, student help, etc. I feel that the list is valuable even if the instructor is unwilling to take on a lot of extra work in copying and mailing manuscripts. For instance, one still has the option of visiting the school to read a paper. Also, instructors armed with a complete list of papers written since "Year One" can advise their own students on promising or overdone topics for research. It is a standard procedure in doctoral work to check out the lists of titles in *Dissertation Abstracts* (University Microfilms, Ann Arbor, Michigan) before starting a dissertation so that duplication of research is avoided. By the way, University Microfilms will send a Xerox copy of any dissertation in its list to anyone who is willing to pay for it. The cost runs about five cents per page. Most graduate schools in the country are part of the system, and require each doctoral student to prepare a copy of his thesis for the Xerox Corporation and to apply for copyright as condition for receiving the doctorate. . . .It is important and valuable for us to at least know what has been written even if we don't actually own a copy of it or read it. It goes without saying that it is even more valuable for us to be able to read or acquire a manuscript on a topic of interest to us. . . .

With this system, SNAG can perform a valuable service for its members and remain free of liability itself. . . .
(In compliance with the above request, the SNAG newsletter editor will assemble and publish a list of any and all instructors who desire to respond to IDEA CORNER. The list of cooperating instructors, along with a list of abstracts under their jurisdiction, shall be published in the June 1, 1976 issue but must be received by May 1, 1976. The newsletter, therefore, requests that participating instructors forward a list including their name, school, address, along with a list of theses containing author's name, address date number of pages, brief description (if the title is not adequate), cost (if any), whom to write and how they desire the handling, etc. It is also requested that participants require present and future students to provide you with a Xerox copy of future theses. This list shall be updated when necessary.)

# opportunities

1. Reviewers and Correspondents sought for jewelry shows: Preferably people who are knowledgable about the technical aspects of metalsmithing and jewelry making (who can write analytically), photography (black and white), and have some sense of exhibition or installation techniques. This seems like a fairly tall order, but most reviews of jewelry in this country are not thorough enough and do not function to educate both the viewer and reader and the exhibiting artist. If you have the qualifications and interest, please contact Robert Liu, Editor, The Bead Journal, P. O. Box 24C47, Los Angeles, Ca., 90024. Mr. Liu is also interested in doing articles on the work of metalsmiths/jewelers so if you are interested in possible inclusion, please contact Mr. Liu for full details.
2. The Elder Craftsmen, Inc., is seeking consignments from craftspeople over 60 years of age for the Elder Craftsmen Shop. A copy of the organization's guidelines for consignment may be obtained by writing: Field Project The Elder Craftsmen, Inc., 137 E. 57th St., New York, N.Y., 10022. (Crafts Bulletin, published by New York State Craftsmen, Inc., Jan. 1976.
3. Artists Equity Association — This organization is for professionals only. Members are screened before being accepted. AEA wishes to include craftspeople at this time. AEA is a national organization and also has chapters. It is involved in obtaining benefits through legislation such as getting full value deductions from your income tax if you have given an object to a non-profit organization. At this time, only costs of materials may be deducted. Also, brochures are published periodically. Included are, "Ethical Guidelines for Juried Shows", and "Business Practices for Artists", etc. For membership application and further information write: National Headquarters, AEA, 2813 Albemarle St., N.W., Washington, D.C., 20008.

# positions

The Department of Art, University of Wisconsin/Madison, is seeking candidates for a one-year replacement position at the rank of Lecturer in the jewelry and metalsmithing area for academic year 1976-77.

# members' activities

Glenda Arentzen conducted a two-day workshop at Peters Valley Craftsmen, Layton, N.J. Ms. Arentzen's presentation was entitled "Marriage of Metals". The workshop was held February 28-29, 1976.

Bob Ebendorf participated in "Seminar '76" at LaSalette Seminary, Enfield, N.H. The seminar was held from January 11 through 17, 1976. He will also be a juror in the 10th Annual Juried Craft Show of the Central Pennsylvania Festival of the Arts.

Arline Fisch exhibited in the Florence Duht Gallery in New York City, December 3-January 9. Ms. Fisch also had an article entitled "Textile Techniques in Metal" published in the December 1975 issue of *Craft Horizons.*

Mary Lee Hu and Heikki Seppa ran into a rare opportunity to show their slides to an audience made up of 30 Swedish, 20 English, and 25 American students and craftsmen in the Royal College of Art in London.

Claudia Kuehnl won a $5000 National Endowment Grant for Crafts, metalsmithing. Ms. Kuehnl also exhibited in Lowe Art Museum "Precious Metals" show.

David M. LaPlantz exhibited in the "1975 California State Fair—Art Exhibition" in Sacramento, Calif. August-September 1975. He received the Third Award, a $50 Prize Award, and an Honorable Mention Award in Jewelry and Metalwork.

John Marshall gave a workshop on Friday, March 19, at Illinois State University.

Harry O'Conner conducted workshops at The Banff School of Fine Art, Banff, Alberta, Canada: "Hand Foundry Techniques for Casting Metals" Mar. 6-7, and "Exploring Enameling" Mar. 13-14. Also conducted was a lecture/demo Mar. 2, University of Calgary, Calgary, Alberta, Canada: "Micro-Metalwork" bridging the gap between jewelry and sculpture.

Barry Merrit, Bob Ebendorf, Claudia Kuehnl, Gary Nofkee and Steve Albair are exhibiting at Duryea Hall, Bradley University, Peoria Ill. The show is being held February 13 through March 8, 1976.

Albert R. Paley, Jr. was named the 1975 winner of the Fairchild Award. He received the award in recognition of his creation of the entrance gates for the Renwick Gallery of the National Collection of Fine Arts, Smithsonian Institution, Washington, D.C. He also won the "Design in Steel" award from the American Iron and Steel Institute.

Heikki Seppa, while visiting his native Finland, was the recipient of the Saint Elegius Medal from the 70-year-old Finland's Goldsmith's League. He was also celebrated as the main speaker at the gathering of Finland's Prestigeous Engravers, and Precious Metal Manufacturer's Leagues. He also received their Gold Emblem and the manufaeturer's pennant with his honorary membership.

Walter Soellner exhibited in the 38th Annual North Carolina Artists Exhibition.

Ron Wyncko gave a one-day workshop on "shell forming" at Longwood College on March 3.

# workshops

University of Rhode Island—April 28-30. Rainbow Enterprises will hold the 3rd Annual Spring Professional Crafts Fair at the university. Booth fee is $40 ($55 for tent booth). Contact: Andrea Kotula, 1 Rose Court, Narragansett, R. I., 02882.

Frederick, Maryland—June 1-6. Applications for the Frederick Craft Fair are available for professional craftspeople. The wholesale/retail juried fair is open to all U.S. craftsmen. Deadline is March 10.

Gaithersburg, Maryland—September 22-25. National Craft Fair at the Montgomery County Fairgrounds; deadline is March 10. For further information and application, write: Noel Clark, Director, National Craft Fair, Gapland, Md., 21736.

New York—deadline May 1. Sterling Silver Design, 18th annual competition, sponsored by the Sterling Silversmiths Guild of America, with prizewinning entries to be shown at Lever House, New York. Open to all U.S. residents who are students of design on a college, technical, or graduate level. Jurors: Alma Eikerman, Jonathan Fairbanks, Paul Warner. Awards, cash prizes. Entries are to be submitted in the form of a finished piece, and must be accompanied by working drawings showing details of construction. Write: Sterling Silversmiths Guild of America, 1111 E. Putnam Ave., Riverside, Conn., 06878.

Pennsylvania—July 4-August 15, 1976. The 10th Annual Juried Craft Show of the Central Pennsylvania Festival of the Arts will take place in the Pennsylvania State University Museum at University Park. It will be the Festival's observance of the bicentennial year, open to all craftsmen in the 13 original states.

Pennsylvania—July 15-18, 1976. The 10th annual Central Pennsylvania Festival of the Arts sidewalk art and craft sale and exhibition is including a newly expanded juried section consisting of the 100 most choice locations. Juror will be Jack Troy, potter from Juniata College. Brochures will be available April 1. Write: Marilyn Keat Managing Director, Central Pennsylvania Festival of the Arts, Box 1023, State College, Pa., 16801.

Bozman, Montana—April 1976. "Exhibition of Metalwork", invitational of thirty metals people in the most complete metals exhibition in the Northwest Region. Sponsored in part by the National Endowment of the Arts and the Montana Arts Council, Fine Arts Gallery, Montana State University.

Oklahoma & Virginia—"Forms in Metal: 275 Years of Metalsmithing in America" sponsored by the Museum of Contemporary Crafts and Finch College Museum. This exhibit will be at Philbrook Art Center in Tulsa, Ok. from March 15-April 12 and the Virginia Museum of Art in Richmond, Va. from May 10-June 7.

Massachusetts—May 9-30. The Greater Fall River Art Association 18th National Exhibition is open to all craftsmen and artists in the U.S. Juried. Cash Awards. Fee: $5 per piece. Slides and entry forms due March 1.

For further information and forms write: John Gagnon, 80 Belmont St., Fall River, Mass., 02720.

New York—May 2, 1976. The International Women's Arts Festival is holding an outdoor celebration of women in the arts at Rockefeller Center (rain date May 9). Performances by women in dance, music, theater, literature, films, and photography are scheduled from noon to 6 p.m. A juried crafts fair open to craftswomen within a 100-mile radius of New York City will be held concurrently on 51st St. between 5th and 6th Aves. 10'x10' space costs $30. Application deadline: February 18.

Deer Isle, Maine—Haysack 76. A series of five sessions has been planned for the '76 summer starting on June 20 and ending on September 24 at the Haystack Mountain School of Crafts. Charges per person for tuition, room and board are: $150.00 per week for twin bedroom accommodations. The day rate is $60.00 per week to include luncheon and instruction. Those sessions concerning jewelry will be held: June 20 to July 2—Poets and Craftspeople (Natalie Paul); July 4 to 23—American Indian Crafts (TBA); July 25 to August 13—Regular Session, Jewelry (George Van Duinwyk); August 15 to September 3—Production Workshop, Jewelry (George McLean); September 12 to 24—Production Workshop, Jewelry (Miye Matsukata).

Penland, N.C.—Listed below are workshops that will be held from May 31 to September 17 at the Penland School of Crafts. Fees include registration-$60.00; room and board-$77.00 per week per person, double room with twin beds. Non-resident students' application fee is $15.00, payable with the application. Not refundable. The registration fee for all other students is $60.00, not refundable and payable with the application. Materials, firing charges, and glass blowing fees as charged all other students. Workshops are as follows: May 31 to June 11—Lapidary by Henry Graves, Jewelry by Drewry Hanes; June 14 to June 25—Lapidary by Henry Graves, Jewelry by Jim Meyer; June 28 to July 16—Lapidary by Roy Clifton, Jewelry by Mary Ann Scherr; July 19 to Aug. 6—Lapidary by Roy Clifton, Enameling by Bill Harper, Jewelry by Jamie Bennett; Aug. 9 to Aug. 27—Enameling by Bill Helwig, Jewelry by Gary Noffke; Aug. 30 to Sept. 17—Enameling by Mel Someroski, Jewelry by George Van Duinwyk.
(For further information, write: Registrar, Penland School of Crafts, Penland, N.C., 28765. Phone (704) 765-2359.)

Gatlinburg, Tenn.—Workshops will be held this summer at Arrowmont School of Crafts. You may receive graduate, undergraduate credit, or non-credit through the University of Tenn. A high school diploma is required in order to receive undergraduate credit. Fees include: Arrowmont Registration Fee (non-refundable) $15, University of Tenn. Application Fee $10, Tuition $70 per week, Double Room $90 per week. Workshops and dates are as follows: June 7 to 18—Beg. and Adv. Jewelry (Getty); Beg. and Adv. Enameling (Illman); June 21 to July 2—Metalwork/Enameling (Mafong, Whisonant); July 12 to 16—Adv. Enameling (Bates); July 19 to 23—Electroforming (Moty); Beg. Jewelry (Anderson); July 26 to 30—Adv. Jewelry (Anderson); Aug. 2 to 13—Beg. and Adv Jewelry (Caldwell).
(For more information, write: Arrowmont School of Crafts, Box 567, Gatlinburg, Tenn. 37738. Phone (615) 436-5860.)

WORKSHOPS AND LECTURES, by Bob Ebendorf

Mary Lee Hu is in the process of conducting several workshops on her wire construction techniques. These workshops are well documented and technically presented as they include many slides of wirework (including her work). Mary Lee presented several workshops last fall including two days for the New Jersey Designer Craftsmen and a week at New Paltz State University. The New Paltz visit was sponsored by a N.E.A. Grant given to the Metal Department for the "Visiting Craftsmen Program".

Mary Lee has also been invited to conduct many workshops this spring including three days at Boston University. Arline Fisch and Joel Bagnal shall host Mary Lee in Boston as she works with their metal students.

If anyone is interested in contacting Ms. Hu about workshops of this kind, write: Mary Lee Hu, 7502 River Rd., Olmstead Falls, Ohio, 44138.

# films & slides

1. Fine Examples of Chinese Enamel Ware. A set of 40 slides with notes.
2. Fine Examples of Chinese Jade. A set of 40 slides with notes.
3. Fine Examples of Chinese Bronze. A series of 2 sets of approx. 40 slides each with notes.
4. Fine Examples of Chinese Carved Laquer Ware. A set of 40 slides with notes.

The above sets are available in unmounted slidefilms, $10.50; 2x2 glass mounted, $30.00; 2x2 cardboard-mounted slides, $22.00. Write: Budek Films and Slides, Pelham St., Newport, R.I., 02840.

# publications

*Jewels of the Pharaohs.* Cyril Aldred. Chapters on the uses of ancient Egyptian jewelry, the craftsman and his tools, techniques, materials and the forms of the jewelry. 250 pages, 100 color plates. The text is well cross-referenced to the plates. Published by Thames and Hudson, 30 Bloomsbury St., London, WCIB 3QP, in hard cover and paperback. £2.75 for paperback (approx. $5.75 U.S., plus postage-approx. $2.50 for airmail). Available from U.S. Praeger Pub., N.Y., $15 (discounted in some places).

180693. *Plastics For Jewelry.* By H. Hollander. 328 black/white illus., 46 color plates. Pub. at $16.95, now $7.98.

149788. *National Types of Old Pewter.* By H. H. Cottrell, A. Riff and R. M. Vetter. This revised and expanded edition is a boon not only to advanced collectors, antiquaries and curators, but also to beginning collectors. Originally pub. at $13.95, now $3.98.

121824. *The Autobiography of Bevenuto Cellini.* Ed. by A. Tamarin 132 illus. Originally pub. at $5.95, now $1.

109867. *The Crafts of the Modern World.* By Slivka, Webb & Patch. 405 illus., 25 in full color. Originally pub. at $17.50, now $2.98

181320. *The Great Book of Jewels.* By E. A. & J. Heininger. 206 full color plates. 94 black & white photos. Includes fascinating tales of the Tiffany Diamond, Empress Farah's Crown, the notorious Hope Diamond, and much more. Originally pub. at $69.50, now $24.95.
(Orders for the above publications should be sent to: Publishers Central Bureau, Dept. 435, 1 Champion Ave., Avenel, N.J., 07131. The shipping & handling charge is $1.50.(Be sure to include sales tax and proper number.)

*The National Guide to Craft Supplies: The Craft Yellow Pages* by Judith Glassman has been released by Van Nostrand Reinhold. The craft directory lists more than 600 craft supply sources in the U.S., Canada, England, Australia, New Zealand and Taiwan including craft bookstores, periodicals, societies and galleries.

*Crafts Magazine* is published six times per year and costs $6.50. It is highly recommended to all craft interested people by Eleanor Moty. Write: Circulation Manager, Crafts Magazine, 28 Haymarket, London SW1Y4YZ.

# technical corner

**GLASS BEADS by Jane Booth**
**(First North American Serial Right-One Time)**

Jewelers often make beads of the materials we know how to use—metals, bone, wood, plastics. If we use glass beads, they are made by someone else, probably in another country. Production of glass beads in the United States is nil. Craftsmen around the country use the same beads in jewelry, textiles, baskets, etc. It need not be that way. Exploring ways of stretching ourselves to make new, innovative jewelry, we can make unique glass beads to suit our designs.

Beads do not have to be round or have holes in the usual place. Glass in jewelry can be hollow or solid, clear or full of light-catching bubbles. It combines well with silver and gold and can be brilliant, frosty or irridescent.

It is exciting to tell SNAG people how to make glass beads and forms for contemporary jewelry. You are exactly the right audience with art and metal training and knowledge of kilns and torches. Many of you are working in schools where there may be at least one glassblower's torch with oxygen and gas as well as a staff or faculty person to teach you fundamental glassworking skills (probably in a chemistry department).

This article will not be long enough to tell all about making glass beads; but here are some cautions, experiences, reading suggestions, product and equipment information. Some kinds of bead making will be mentioned with recommendations that you NOT try them in the beginning for safety reasons. I consider this necessary to keep you from trying some techniques without adequate preparation.

Be warned! If you are persuaded to explore bead making and glass forming, your life may never be the same. It leads to happy study of ancient beads and containers, composition of glass, enamels and cultural anthropology.

Glass throughout history has been made in variations of the same basic sand, lime, potash or soda recipe with additions of almost any of the earth's elements to alter working properties, color or clarity. Referred to by glass people as "soft" glass, it works at comparatively low temperatures of about 1000 degrees C. Even today, most glass we see and use is this type, tableware, bottles, windows, light bulbs and beads. Probably every bead you have ever seen is of "soft" glass. For a bead maker, scraps of this already made glass, stained glass, broken bottles and vases, are easily found at negligible cost. It can be made from scratch. Colored rods and tubes can be bought.

Lampwork soft glass beads can be made by blowing, building (like pot coiling), winding on a mandrel and pressing. Since this glass is handy, you might think of trying to use it first, but I suggest that you wait to learn more about glass working in general before attempting it. Various compositions of soft glasses you might use all have differing coefficients of expansion, fusable in the fire, but incapable of remaining stable upon cooling. A beginner using soft glass scraps to make beads may have trouble with hot glass shattering and flying about to hit person, work area or fuel lines.

One type of soft glass bead you can make easily is composed of crushed glass poured into a firebrick mold and fused in a kiln. Africans make adjagbas of crushed, fused glass in clay molds. They buy or barter for European beads in their favorite colors, crush them and use the glass to make their own beads. My way to make molded beads is to bore 1/2" to 3/4" holes in a firebrick, stick a tiny post of water-soaked hardwood or clean small copper tubing in the center of each hole (this will make the bead's hole), and then fill each mold with crushed glass. Crush your own glass or use large screen enamels. Make designs with different colors of glass bits or enamels or glass threads. Dampen crushed glass to hold it together neatly in the mold while adding colored designs. When glass fuses in a firebrick mold, it sinks and shrinks, so make the mold holes larger and deeper than finished bead is to be. Molds can be prelined with kiln wash for easier removal of cooled beads. If kiln wash is not used, free beads with sharp tool and tumble with abrasive to desired surface. You can grind bead surface, but use water, so you will not breathe flying glass dust. Make tests to determine time needed to fuse your particular glass in its mold. Allow beads to cool in mold in closed kiln overnight.

The glass I do suggest you use for lampwork beads and small forms for jewelry is Corning clear Pyrex 7740, a "hard" borosilicate glass that fires to working consistency at about 1245 degrees C. Borosilicates, first developed in 1892 by Otto Schott, a German glass chemist, contain boric acid and phosphoric acid to replace much of the alkalai content of conventional glass. It is strong, resistent to chemical attack and thermal shock, has consistent working properties, can be comfortably worked in the hands with a glassblower's bench torch, and is a fantastically lovely material that deserves to be used in art. It is readily available in rods and tubes from chemical suppliers. Pyrex related glass is available in a few factory colors—cobalt blue, canary yellow-green, and orange and red filter material from Corning. They are a bit expensive and do not remain stable under all conditions when fused with 7740. I combine clear Pyrex with minute amounts of oxides and metals to make colored glass for beads and glass forms, one of the most exciting things I have ever done. You can read elsewhere about coloring Pyrex, but it is not discussed in this article, because I do not recommend it to beginners. It requires special careful attention to safety measures, ventilation and toxicity.

If you buy lampworking equipment to set up a bench in a jewelry department, here are things to know. Several people can schedule working periods at the same torch. One would not want to work more than an hour or two at a time, because eyes and arms get tired. Buy good didymium glassblower's spectacles from optical or welding supplier to protect eyes by filtering out the bright yellow sodium vapor light from burning sodium oxide of the hot glass. Get a full size glassblower's bench torch with two gas controls and two oxygen controls. The Carlisle and Bethlehem Companies make good ones. A well ventilated and illuminated work area about 6'x6' with a bench about 3'x4' are about minimum space required.

There are lots of possible additions and refinements to tools, but the necessary ones are remarkably few and cheap. A glass knife (tungston carbide edge) is good, but a three edge (triangular cross section) file will do to score glass. Glass is scored and cracked off or broken off with pressure behind the score marks. One should have some old long-nose pliers, kitchen scissors, and some kitchen weiner-picker-uppers with woven asbestos tubing socks. Get a ¼" diameter hard carbon rod over six inches long and pointed like a pencil, a hard carbon paddle 2"x3", two tweezers about 8" or 10" long, and a flaring or reaming tool made of a sheet brass triangle (about three inches long with 30 degrees point) fastened in a file handle.

If you are lucky, get clean scrap Pyrex from a chemistry department. Do not work scrap that has old chemicals on it. It might cause toxicity problems for you. If you buy Pyrex for beads, get rods 5 to 10mm, capillary tubes and heavy wall tubes up to about 12mm. One pound makes quite a number of beads.

Scientific apparatus glassblowers are geared to make Pyrex forms with even, fairly thin walls and joints, as they are taught to retain the factory thickness to minimize breakage from strain in the glass. Learn all the technique you can from such a person, but keep in mind that glass used for jewelry, beads and solid forms will have a life of banging around during wear. You will want to create extra thickness where needed and engineer your glass pieces to withstand shock. Sections of different thicknesses in a single piece of glass carry on a sort of war of strains with one another. The secret of success in making irregular thickness glass pieces remain stable is to anneal them adequately. Annealing as applied to glass means relaxing strains by reheating a piece to 555 degrees C just to a point under the temperature at which it would soften and distort, then cooling slowly. Unannealed glass sometimes remains whole for quite a while, fooling you into thinking it is stable, then breaking with an ominous "tink". Annealing these tiny forms can be accomplished in two ways. Cool a piece in the fire by turning it slowly in the flame as heat is diminished slowly for 5 to 10 minutes to no fire at all. The second and best way to anneal is to place Pyrex pieces into a kiln/lehr to be reheated to the relaxing point for an hour or so, then leave them enclosed overnight to cool. Remember than annealing is an essential part of glass forming.

Pyrex fires to working consistency about like honey. Soften the end of a Pyrex rod in the flame, revolving constantly to keep gravity from pulling it to the work table in a bloop. You will see softened glass is wonderfully squishy stuff that can be cut, pinched, stretched, pressed, wound, squiggled and dotted. It becomes rigid again very quickly when removed from the flame. If you plan to use solid glass sculptural forms in jewelry, think ahead to how they will be fastened to other parts and shape them accordingly.

The easiest technique for making a clear Pyrex bead retaining the cylindrical factory shape is to score and crack off short lengths of capillary tubing (very heavy wall) and fire polish ends in the flame. Hold bead pieces in the fire with long tweezers.

Here is one way to make a blown glass bead. Place tiny cork in one end of a 12" tube. With ends of tube in your two hands, hold its center in medium torch flame, revolving the tube constantly and ever so gently pushing the ends toward center. As glass glows and softens in the flame, its wall becomes thicker from your gentle pressure and the center hole gets smaller. To keep center hole from closing entirely, hold tube's open end to mouth and blow a tiny puff of air to expand softened part. This is beginning of a bead. When a tube is softened in the middle, the two halves seem wobbly. The trick is to continue to revolve them in line. Make your mind and hands treat it as if it were still straight and rigid, even when you raise the wobbly thing to your mouth to blow. With continued reheating, thickening by pushing and expanding by blowing, you form a heavy walled little bubble, the bead. When its shape and size suit you, remove it from the flame to solidify. Then reheat at one end of the bead and pull away the no longer needed tube, leaving a thin tail of glass on the bead. Crack off the tail into waste can with long pliers. Return bead end to flame to fire polish jagged end, using pointed carbon rod or brass flaring tool to shape hole. Now hold bead's completed end with tweezers, heat other end of bead, and pull off remaining half of tube. Crack off the thin glass tail, firepolish and shape hole. Voila! A glass bead like no other in the whole wide world! Anneal. When your hands and eyes and mind begin to work together, it will be easy to control shape, size, thickness and inner cavity of beads. As you work with glass and fire, you will

GLASS NECKLACE by Jane Booth

see other ways to make beads. All the left over tubing pieces can be fused together to make new usable lengths for more bead forming.

Telling you how to make glass beads in a short article is like explaining how to rub your head and pat your tummy and whistle all at once. You have to try it to make all these instructions become clear. Glass is wild, wonderful, beautiful stuff; and working it is a mystical experience like drawing with fire and light.

(Suggested reading list is available — write the newsletter for a copy.)

# aesthetic question

Why create jewelry, objects, or anything at all? Why create?

Members are encouraged to respond to the above question as well as suggest future aesthetic questions. Responses shall be published in subsequent issues.

## THE AESTHETICS OF FORGING
by Jo-an Smith

Alexander Pope's "And yielding metal flow'd to human form" well evokes the rhythmic flow of forged gold and silver jewelry. The apparent contradiction of hard metal "yielding and flowing" is beautifully and sensuously resolved in this technique.

Forged jewelry first came to my attention in the work of Ronald Hayes Pearson. A great debt of inspiration from his fine forged works is acknowledged. Additional inspiration came from a basic design problem. It was to create a well unified design utilizing only one shape. I defined the "line" as forged sterling and the "shape" as the human body.

The thick-to-thin changes and the alternating planes so characteristic of forged metal lend a subtle variety to these simple pieces. Other options for variety are: the size of the piece (from wrapping the neck to including the whole upper torso), size of wire, type of wire (round, square, triangular), type of metal, and surface treatment. For the latter, both the natural tool marks and a completely smooth finish were tried. The hammered texture seemed to work much better on gold than on silver. The reason may well be psychological. Beaten gold is enough of a rarity these days to make it more interesting than silver in the same state. Whatever the reason, hammered sterling has that when-are-you-going-to-finish-it look. Hammered gold, contrasted with burnished smooth areas, is handsome and leaves no doubt about its finished state.

As a "direct metal" technique, forging is one of the most satisfying available to the metal craftsman. The tools are few and are simple. The craftsman works in close relationship with the metal. The technique is physical and yet (for non-ferrous metals) great physical strength is not required of the forger.

For gold, the annealing, shaping, forging, and finishing operations remained basically the same. The malleability of the gold lent itself to this approach.

In 1913, even Justice Oliver Wendell Holmes was recommending forging (albeit in a more abstract sense).

...to hammer out as compact and solid a piece of work as one can, to try to make it first-rate, and to leave it unadvertised.

(Ms. Smith recommends forgers to first make a mock-up in sprue wax or aluminum wire in order to obtain the overall shape and to approximate the length of wire required. Next bend the center into the desired shape. Turn the piece constantly to avoid distortion. The sides should next be bent into the desired shapes while continually checking the back against the original model. Distortion is a problem during this stage because more directional changes are involved. Annealing and turning of the piece should continue as needed It is important to have the center and two side areas shaped and forged into their final positions and widths before working on the ends.)

## PRECIOUS METALS:
The American Tradition in Gold and Silver

Precious Metals: The American Tradition in Gold and Silver was exhibited in the Lowe Art Museum, Miami, Fla. from November 20 through January 11, 1976. The American tradition of working in precious metals since the country's founding was exemplified in this bicentennial exhibition at the Lowe Museum in Miami. The tradition in silver from the 18th century until the 70's is primarily represented by functional holloware by such silversmiths as Samuel Buel, Jesse Churchill, and the workshops of Gorham, Tiffany, and Kirk. Of particular interest to the contemporary craftsman was the exciting work by both new as well as established smiths and jewelers.

Both the show and the catalogue were handled in an extremely competent and professional manner, and the display work was excellent. The viewer was naturally routed through the show in such a way as to give good appreciation of the continuity of tradition, styles in different eras and an excellent look at the results of the combination of these traditions and styles with the influences of the modern world; a glimpse of the modern world; a glimpse that naturally led the viewer to the question: "Where to next?".

If anyone would like to have a catalogue of the exhibition, write: Lowe Art Museum, University of Miami, Coral Gables, Fla. 33134, Attention: Ms. Carol Hotchkiss, Registrar, or call 305/284-3535. There may be a small cost.

(Dru Parsons, Coral Gables, Fla.)

# question corner

1. Various European countries carry national hallmarks such as a crescent and crown for Germany, etc. Are these hallmarks still used today? Does the United States have such a national mark? What is this mark if indeed it does exist? How are we goldsmiths to use it? – (K.K.)
2. Is there an index of American maker's marks? If so who publishes it? What would be the procedure to get one's mark registered in such a collection? Could SNAG become a registering agency if no such index exists at this time? Would there be an interest in re-establishing the hallmarking of American jewelry with maker's marks, material stamp (sterling, 14k, etc.) and a national mark as well as the "hand made" mark? – (K.K.)
3. Where do the casters find suitable bronze and brass, of the proper color, temperature, physical properties, etc., for the various requirements of their craft? – (A.W.)

**Responses to former Question Corners:**

1. (Is there a copper colored high temp. solder?) Yes, PHOSCO BRAZING ALLOY melt 1350F, 93% copper + 7% phos. Also, if fusion technique is used – copper electrical wire, melt 1981F, .04% oxygen, balance pure copper. (Williams)
2. (Is there a brass colored one?) Yes, almost any low temp brazing rod. See your local welding supply house. Silver solder not essential, in many cases. (Williams)
3. (Is there an alternative to solder for students of fabrication?) Yes, fusion. (Williams)
4. (What can one do about fire scale on sterling?) Protect it from the oxygen in the air, when heated. (Williams)
5. (Is there a copper colored solder? A brass colored solder?) A tradenamed "Silfos" solder has a good copper color. Generally the forphor bearing silver-copper alloys don't flow very well unless the fit is very close.

   A good range of brass colored solders are available from welding supply stores. A 35%, 45%, and 50% silver content solders are ideal for brass and other cuprous alloys. They have generous melting ranges and excellent flow qualities, tensile strengths up to 70,000 lbs/sq. in. Use ordinary borax flux, and feature wide liquidus/solidus range. They are generally more expensive than sterling silver, but do the job very well. (Seppa)

# technical question

What is the exact cause of porosity in casting and how can it be eliminated?

RESPONSES TO PAST QUESTIONS:

(What is the ideal shape [cross section] of a sprue?)

1. This depends on a number of variables, such as: type of casting, method (gravity, cetrifugal, etc.), properties of the metal, temperature of the flask, etc. Anyway, to get my guess in, let us assume a simple, small flask, temperature of the flask and metal proper for the cast, and using a simple centrifuge. The button end should be large enough for proper entering, the sides should be straight enough to avoid turbulence, (turbulence is a major cause of gas porosity and drossy castings) the length of the sprue should be sufficient to give adequate weight to the throw for the type alloy used, and the exit should be large enough to fill the casting without freezing at the orifice, and hence, a poorly defined casting. This is a rather vague answer, but the question was very general. – Allen Williams
2. Historically the gravity casting has benefitted from the practice of square cross-section of the sprue. The theory that the normal liquid behavior is to pour in a round cross-section until the speed of fall in the air begins to round the column toward the spherical form.

   In an enclosed situation, capillary forces take over. If the channels were square, the capillary force would retain some liquid in the corners where the forces are stronger thus congealing part of the metal which would attract oxides and impurities to stay behind. This action tends to let purer metal reach the cast first, leaving the impurities in the button. For some reason the potato casters found that, since their sprues must be smaller than usual, the cluster of very small sprues acted as a sieve and purified the alloy. This phenomenon might be explained by the fact that there is a radical "cold face" at the time of application of the half potato over the hot flask where the "button hole" is full of molten metal. The sudden cooling tends to separate by congealing the oxides, thus slowing their flows into the mold.

   Once, upon proving this theory, a sprue of xiphoidal cross-section was used. It trapped all its fins full of crumply, gritty oxides. – Seppa

(Why use 50% new metal?)

1. The former answers were good, but in addition to the points brought out, the "abuse" of casting alloys also causes the more volatile elements, such as zinc, aluminum, manganese, etc., to dissipate, leaving a metal that may not meet the color and stiffness required. – Allen Williams

# snag information

**RESULTS OF CASTING QUESTIONNAIRE** – (Footnotes are used when answers cannot be abbreviated. Abbreviations are used whenever feasiable. Some abbreviations are: ss-sterling silver, g-gold, K-Kerr, W-M-Whip Mix, sa-sapphire, ru-ruby, dia-diamond, br or brs-brass, crst-crystobalite, fs-fine silver, AC-Allcraft, SW-Southwest, AN-Anchor, ng-natural gas, co-copper, brn-bronze, etc.)

| | Tom Baker | Marcia Lewis | Bert Kupfrman | Gene Pjnowski | Richard Helzer | Edward Higgins | Tom Markusen | Jan & Dan Niebauer | Peter Blodgett | Charles Topping | Bernard Bernstein | John Fix | Heikki Seppa | Klaus Kllnbrgr | Mark Baldridge |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average casting per year? | 50 | 25 | 40 | 100-200 | 20-25 | 100 | 300 | 350-500 | 100 | 100 | 60 | 30 | 12 | 50-100 | 25 |
| Usual type of casting? | cent | cent | cent,char | cent | cent/vac | cent | cent | cent | cent | cent/grav | cent/vac | cent/vac | cent | cent | cent |
| Why prefer above? | ese & go | simple | cst&rslts | simp&acc | %success | detail | results | quality | rslt/ease | con/eff/ec | rslts | res/avail | | exprnce | rslts |
| Average weight of casting? | 2-3 oz | 1 oz | ½ oz | 1-2 (8) | ½ oz | 5 oz | 3 oz | 2-5 oz | 1 oz | varies | 1-1½ oz | 1 oz | ½ oz | 1½-4 oz | 5-15 oz |
| Method of prefered heat? | ox/acet | ox/acet | acetyl | ox/ng | ox/ng | ox/acet | acet | ox/acet | ox/gs | acet/ox | presto | pres/acet | acet/pres | ox/acet | ox/acet |
| Usual metal utilized? | ss&14k | ss,co,g,br | ss,18 24k | ss g brn | ss g | ss | ss,14k | ss,g | ss,14&18k | ss,g,brn | ss | ss,14k | 14k | ss,g | ss,g |
| Prefered investment? | K-satin20 | K-Satin | K-Satin | K-Satin | K-Satin | Ultr-brt | super mld | Pre-Vest | K-Satin20 | Satincast | K-Satin | Satincast | W-M | K Br1Cst | gry (26) |
| Why above? | rslts | ese&avail | rslts | rslts | | unif rslt | strg, acc | rslts | rslts | ec/avail | ava/rslt | cost | ese/qual | chp/rslts | no poros |
| Other brands tried? | K&W-Mcrst | crst | | none | (13) | | Kerr | Kerr | others | none | R&R | crst, Br1C | all | WpMx (24) | K-many |
| Do vent & when? | no | no | no | no | always | no | no | no | occasion | no | no | no | no | no | whn large |
| Usual burn-out time? | 7 hr | 2-4 hr | 1-2 hr | 2-2½ hr | 5 hr | 8-10 hr | 2 hr | 1½hr | 0 hr | 2/3 hr | 6 hr | 5 hr | 2 hr | overnight | 6 hr |
| Peak burn-out temperature? | 1200 | 1600 | 1275 | 1200 | 1350 | 1200 | 1300 | 1800 | 1300 | 1300 | 1300 | 1250 | 642 dgs.C | | 1350 |
| Casting temperature? | 750ss,900g | 900 | 900 | 900-1000 | 900 | 1000 | 850ss,925g | 1100-1400 | 7-900 | 900 | 1250 | 900-1100 | 532 dgs.C | any tmp | 1000 |
| Percentage of new metal? | 50% | 25% | 75% | 50% (9) | 50% | 0-some | 50% | 50% | little | 25% | 50% | 80-100% | 0-100% | 100% | 30-50% |
| How long before submersion? | 5 min+ | 1 min | 3-5 min | aft red | 1-2 min | 15 min | 0-15 min g | 5 min | 5 min+ | black | 5 min | 3-5 min | black | 1 min | 15 min |
| Use of vacufilm or debubb? | yes | no | no | no | yes | yes | no | yes | yes | yes | no | yes | yes | no | no |
| Use of reservoir (button)? | no | no | yes | no | no | no | no | no | no | no | no | no | no | yes | no |
| Use of asbestos liner? | always | no | no | no | yes | gen no | no | no | no | no | no | yes | no | no | no |
| Shape of sprue (crss-sctin)? | round | round | round | round | cone | round | round | round | round | square | round | round | square | rnd&flt | round |
| Minimum sprue length? | ¼" | ¼" | 2 cm | ¼" | 3/4" | ½" | ½ " | ¼" | ½" | ½" | 0-½" | 1/8" | ½" | 3/4" | ½" |
| Average gauge of sprues? | 6-8 | 10 | 8 | 8 | 10 | varies | 8 | 10-12 | varies | varies | 6-10 | 8-10 | 6-10 ga | 10 | 6-10 |
| Successful bi-metal casts? | no | yes | no | yes 50% | | | yes | yes, ss,g | bez | never | untried | untried | no | no | occas |
| Successful stones cast? | sa,ru,dia | syn ru | | syn ab | | synths | syn crndm | (16) | | agate | | untried | syn ru&sa | jade | qtz |
| Quality of casting? | gen excl | 80% | excelnt | 99% | good | 90% | 99% exc | 99.9% | 98% | some | adequate | okay | excelnt | 100% | excelnt |
| Porosity problems? | rare (1) | yes (4) | some- | wht gld | yes | at times | no | (17) | (19) | | some | yes 95% | rare (23) | rare (25) | rare |
| Unsuccessful stones cast? | untried | | flat (6) | | | (15) | | garnets | | | | untried | none | onyx,aqua | untried |
| RESULTS OF ANNEALING SECTION | | | | | | | | | | | | | | | |
| Anneal temperature(sterling)? | dul red | pale yel | 1225 | dul red | 1300 | frst red | cher red | 1200 | frst red | dul red | dl-rd,1150 | dl cher | 642 dgs.C | red | 1200 |
| Maximum temperature allowed? | dul red | below cher | 1300 | dul red | 1350 | | red | 900 | frst red | | 1200-1300 | | same | | 1200 |
| Use of protective coating (ss)? | sometimes | no | no | some | yes | no | handy flx | yes | yes | no | Prip | no (22) | no | no | rare |
| If yes above, what & where? | Prip (2) | | | flux | (14) | | SW,AC,AN | (18) | (20) | | | | | | Prip |
| If yes above, does work? | yes if (3) | | | if clean | almost | | 75% | yes | some | | yes | no | | | some |
| If no above, how remove scale? | emry&acd | color (5) | don't (7) | abrsve | buff | acid | 500 emery | pckling sl | finish | abrsve | (21) | trpl&acd | abrsv/plt | | abrsv |

FOOTNOTES:

(1) suspect dirty metal or overheating; (2) homemade-formula from Philip Morton's book; (3) if several coats are applied; (4) when using plastic pieces, instead or in combination with wax; (5) place a "firescale finish" on the completed piece by heating to yellow color, quench, pickle, brass wire brush with sudsy water at least six times; (6) found that boiling out the wax pattern, then placing mold in kiln for one hour—depending on size of flask—has improved the casting surfaces and allos for a more efficient capture of wax; (7) usually anneal the piece four or five times, building a nice even coat of firescale; (8) have cast up to 15 oz of silver; (9) self-refined "old" metal; (10) did research and experiments on Nos. 22-24 but haven't used since then—too gimicky. Conventional stone setting is easier and faster; (11) Ransom ¼ Randolf gray investment $18 per hundred purchased directly from factors. Gives good clean, white castings. (12) boric acid & alky—drugstore; (13) Kerr Bril-cast, cristobolite; (14) Alcra-flux from Allcraft; (15) agates turn color; (16) rubies, garnets, peridots, syn. stones—emeralds sapphires, etc.; (17) rarely because use very little borax and metal is absolutely clean molten and ready; (18) yes, use pickling flux for soldering and HR Eurema pickling hard solering solution. Also quench in denatured alcohol or remove while hot or quench in pickle; (19) only if metal is dirty or overheated; (20) Handi flux or saturated boric acid. Allcraft sells a preventative that is okay or make your own. None seem to work entirely; (21) Prip solution works but it should be sprayed on in thick coat. Spray on with an atomizer while the piece is gently heated until a thick white crust develops. Do not use any other flux such as Handee flux which interferes with the action of the Prip flux and would produce firescale. Use this especially for large pieces of holloware as it saves hours of cleaning later. Am curious to know what role the di-sodium phosphate plays in the formula. Firescale can be removed with 600 wet and dry silicon carbide paper or with a slow 300 rpm bluff and pumice and water; (22) have tried Alcra-flux, boric acid, etc.; (23) porosity occurs when keeping metal hot too long. Oxides are effectively eliminated by the use of square sprues, ie, the corners congeal the metal early, thus trapping all the impurities. The natural flow form of liquid—molten metal—is a round column. The square passage acts as a sieve and sometimes very small—1 mm—sprues do the same; (24) Whip-Mix did not work and produced uncontrollable pits and porosity in silver; (25) usually cast about 4 or 5 rings at a time, and have cast many times into a cold mold; (26) Modern Materials Mfg., St. Louis.

# educational corner

*Conference: "How to Make Art & Survive"*
January 24, 1976

It is very appropriate that a conference featured as "How to Make Art and Eat Too. . .Survival in the Real World" should be such a feast. With the Metals Invitational 1975 show at Virginia Commonwealth University's Anderson Gallery as visual enticement, a superb panel of speakers as the conference nucleus, and the concerted organizational efforts of Jim Meyer, Nancy Thompson, Bruce Koplin, and VCU students, all I spoke with concurred that a very valuable synthesis of objects, people, and information had occurred. Extremely fortunate in having a panel with such a diversity of experiential background, we heard from Professor Kurt Matzdorf, Master Goldsmith from New York State University at New Paltz; Glenda Arentzen, a one of a kind jeweler from New York City and winner of Diamonds International; William Carreras, gem merchant from Richmond; and Beth Sphar, a production oriented jeweler for Haig Kambourian, Handcrafted Jewelry, Richmond, Va. While visually entertaining us with slides, each panel member spoke of his personal experience in customer relations, commissions, the pros and cons of wholesale and retail work, materials, shows, integrity, etc. — from how one presents his work to the public to why. Many, many good points were made, some of which I will soon attempt to enumerate here for you. Unfortunately, however, I cannot begin to convey the charm, wit, and passion for this craft/business that these people radiated — or their total willingness to share information. When these four enthusiasts combine tales, there lived the feeling that students, as some-day-soon professional jewelers/metalsmiths, will be part of an enormously exciting and viable art form — that there is more than just hope, but proof, that it is possible after a spoiled art students' existence to continue finding one's work personally stimulating, even when it is one's source of income.

That her manner exudes enthusiasm and dedication, that her jewelry reflects that attitude, and that her business is growing as much as she had hoped and more, are reasons to be thankful for the participation of Glenda Arentzen. Her presentation was to the point, competent, and full of thought-provoking ideas. It occurred to me that listening to her was exactly like watching her make a piece of jewelry — that in her work are the same considerations: efficiency, quality, and extreme care in design. What seemed most important was Miss Arentzen's emphasis on the subtleties of "obvious" good business: that there is no way she, as a craftsman, can compete with production firms — so it is "obvious" one must make one of a kind items; that, because it is a known fact that production firms rip off artists' more successful designs, one must create designs that are impractical to mass produce using one of a kind materials, as unusual stones or experimentally colored golds as Glenda does — thereby automatically protecting one's business and avoiding the headaches of copyrighting; that as Beth Sphar also mentioned, how fast something can be made is just as important in survival as how well it is done; that it is important to "know" the right price to charge a customer so that he or she will return to buy again; that there is a huge market in corporate commissions, often only requiring drawings, that is too often left untapped by craftsmen; that one should not turn one's artistic nose up at repairwork — repairwork can generate new commission customers — also, by accommodating these customers, they can slowly be educated to reach a better understanding of modern jewelry; and then there was one very human reminder that success is very secondary to the excitement in knowing that one lives by what comes from the hands.

With a wink of his eye, a story or three about being in the right place at the right time, and the confession that he didn't incorporate metal into his existence until the age of 31, philosopher/goldsmith Kurt Matzdorf mesmerized us all. Not quite as succinctly as Glenda, but with great gusto, Professor Matzdorf provided a view of another possible way to approach making a living in metal. Like Glenda he emphasized the importance of creating a market for yourself. For him, that market is in liturgical and academic pieces. As I listened, though, one theme seemed to recur — the importance in recognizing the historical evolution of man's cultures and the essential role of celebration in those creatures. So, for Professor Matzdorf it is more a matter of realizing and and catering to a very basic need in our society than creating a market. In designing a piece he emphasized that one must be aware of the historical connotation of materials, gems, imagery, and the commissioner's personality (ies) as well as the object's overall beauty because it must serve as a continuation of a tradition as well as an art object. The attitude that a customer must always be kept happy went hand in hand with Kurt's espousement of the fact that there is always something new to learn, that there is without fail something likable in any person. It was quite obvious to me that the last statement was not just a conglomeration of words. His presentation's humorous and educative qualities, along with the beauty of his work could do nothing but please his conference customers. And, in talking with him, (others noted the same experience), there was a warm attentiveness he gave to the conversation, his questions were sensitive, and his entourage of patrons, (Fred must be mentioned), students, and friends became quite comprehensible. Often added to the end of a Matzdorf statement was "you see. . ?" — and there was much to see.

How to start with $500 and build a quality oriented as well as successful gem business is a theme all of us could relate to. Starting as a student who disliked working in the cafeteria at the University of Virginia, William Carreras began selling diamonds and composed a thesis on selling diamonds to the middle and lower classes. A recognition of the role of tradition again came into play. That most people want things

of obvious lasting value. If a design is not timeless, at least its materials must be. With a very sensitive eye and the fact that in fine jewelry there is more money in stones than in the metalwork, Carreras has collected and will sell one a breath-taking array of naturally-formed unusual gems, especially diamonds of wonderful hues of yellows, brown, pinks or black. Beth Sphar's emphasis that having a healthy selection of loose stones on hand for customers to peruse helps Haig Kambourian's sell more jewelry became another testimony that the beauty and value of gemstones should not be overlooked. One of Mr. Carreras specialities is in his stone combination in a piece of jewelry. The other seems to be the great care he takes for his customers and his concern in educating them about his diamonds. Like Glenda proposed, there is a dual purpose in education: for good business preservation and a better public understanding of modern jewelry. It seems that purpose was served at the conference — most students I know seldom consider gemstones in designing their work. I think a new awareness has crept into that storage space of information that controls future designs.

After the conference, an immediate student reaction was one of thoughtful distress – that one had better start setting valuable stones and using precious metals and forget about "making art". As the days pass, however, I'm sure each of us is sifting through that wealth of information and stimuli and subtly rearranging a little of this or that in regards to our work, and with a little less panic than on the day of January 24! For me, and many others, just as important as the program or the Metals Invitational was the chance to talk with everyone over beers and smiles about dogs or landlords, places to see, or conferences to come. Just as this conference's conception was at the SNAG conference and show in Atlanta last spring, I hope someone carried away enough energy from Richmond to start planning another feast. – Ann Heiberger (VCU graduate student)

# comments

(Response to "The Unaesthetics of Fabrication" Volume I, Number 3) – by Heikki Seppa

In response to your comments on various technical approaches to metalsmithing, I can't help but offer some defense for fabrication. It is one part of metalsmithing activity without which one could not do anything. It is the first basis for handling metal. It is that primal state that has to be understood first. It is hardly the fault of the technique if the "artist" cannot develop his skills and vision beyond that. I agree that too much work is done on this elemental state; too much bad work is also done by casting – perhaps even more.

Our general level of enthusiasm and vigor in metalsmithing deserves a much more complete understanding of what can be done and how (see following article). Fortunately we have, in this country, a number of excellent schools where, in a very short time in history, a tremendous educational feat has been performed.

There is a lot of work left to be done; our consciousness of *form* has been clouded by the immediate excitement of the surface techniques. We have not focused on the complexities of possible *structures* in our work. Structural aesthetics has been observed by other craftsmen long ago. The gold-silversmiths are still toying with the same primitive forms and structures. Our emphasis on the *tactile* aspects of our work is still to be nurtured.

"Shoemaker should stick to his last" is an aphorism which the metalsmith should have heeded long ago. You mention a fabricated look, cast look, a formed look. This is very bespeaking of the general trend, which probably was inherited and constantly fanned on by the visual artists. It is their business to make their art visually right. Ours is only one part visual the rest structural and tactile, just to mention two.

The idea in jewelry that it must look good leads us to areas where we have the least concern.

For fear of generating undue polemics on the issue of terminology, let me be brief and say that, while I realize the fact that "the need is the best wordsmith", I also realize the need. The metalsmiths are, at present, prisoners of our own terminology. We should come out of the outdated and underdeveloped eighteenth century and update our glossary by the commensurate vocabulary with the strength, excitement and vigor of our creativity in the twentieth century.

Our organization, SNAG, can be a very useful instrument in upgrading our communicative means. The newsletter, dear editor, is exactly such an arm to do the job.

HELPFUL HINT
by Tom Baker

If you are looking for die-forming material, try formica bonded to 3/4" plywood instead of masonite. You can get counter top cut-outs from plumbers that sell for a dollar or less and form into excellent dies. These cut-outs are usually 3/4" plywood with the formica already bonded to the surface, and each is large enough for two to four sets of dies.

## BIOGRAPHY OF MIYE MATSUKATA

Two educators stand out in my life. One in Japan, who taught me to appreciate the everyday objects of Japan and to love new experiences. The other was an art history teacher in college who made the history of art and composition lucid and alive. He taught, as did the first educator, that education is a continuous experience, that whatever we acquire in childhood and in school is the equipment for a continuous learning process.

Somehow when I speak of the beginning of my career—now a quarter of a century ago—it all sounds as though I was launched in the dark ages. The division between fine arts and crafts was wide. No mere jeweler could be an artist too. Jewelry was only an ornament, not an art form. There were no metals courses for full credit in universities, much less master's programs; the Craftsmen's Council was just starting; there was no Craft Museum; art critics paid no attention to "crafts" in a show even if they were in the same room with paintings.

Although today there seems to be great progress in acceptance of the designer-craftsman with a degree, I ask "Why are there so few independently operating jewelers outside of educational institutions?"

There are hundreds of shows a year, mostly sponsored by universities and small museums, which help build up a fat resume as credentials. But since these shows are sponsored and judged by those who are on the same wavelength as those who participate in them, they do not include the opinions of the "outside world".

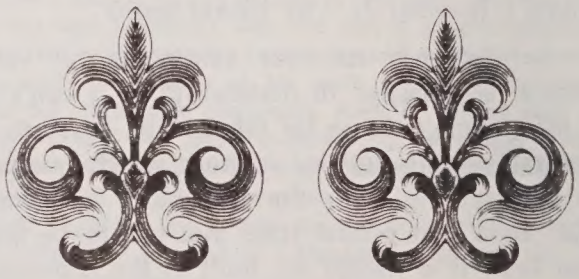
Unfortunately, the man on the street who thinks "Rembrandt" when he thinks "painting" thinks "Tiffany" when he thinks "jewelry". Vermeer and De Hooch painted for the well-to-do and educated Dutch. This is somewhat obscured for us because we only see their work enshrined like so many idols in museums, but in their day paintings were part of urbane life. Here is where I have gone my own way, for while my public is small and select, it is nevertheless public. In the 25 years I have been in business, my livelihood has come from the support of the "outside world". I have had to have my pieces worn and enjoyed; I have had to listen to what people think of themselves and what they want, or think they want. In the past I have done some things that I never thought I wanted to do, but after I'd done them I was happy I had learned from others' needs. I used to long to be able to say, "If you don't like my designs and pieces, go elsewhere", which I am now in a position to say, but it has taken 15 of the 25 years to reach this point.

The difficulty with a position such as mine is that I am sometimes in limbo, for I am not at a university from which my livelihood might come, but neither am I among the affluent "commercial" jewelers. I am more in the position of a painter whose work is accepted or not. I have tried a production line; I have tried wholesale; and I have tried consignment. But since I can't make even two-of-a-kind, I cannot mass produce, so I have to be in the one-of-a-kind category. Therefore, I have had to find my public.

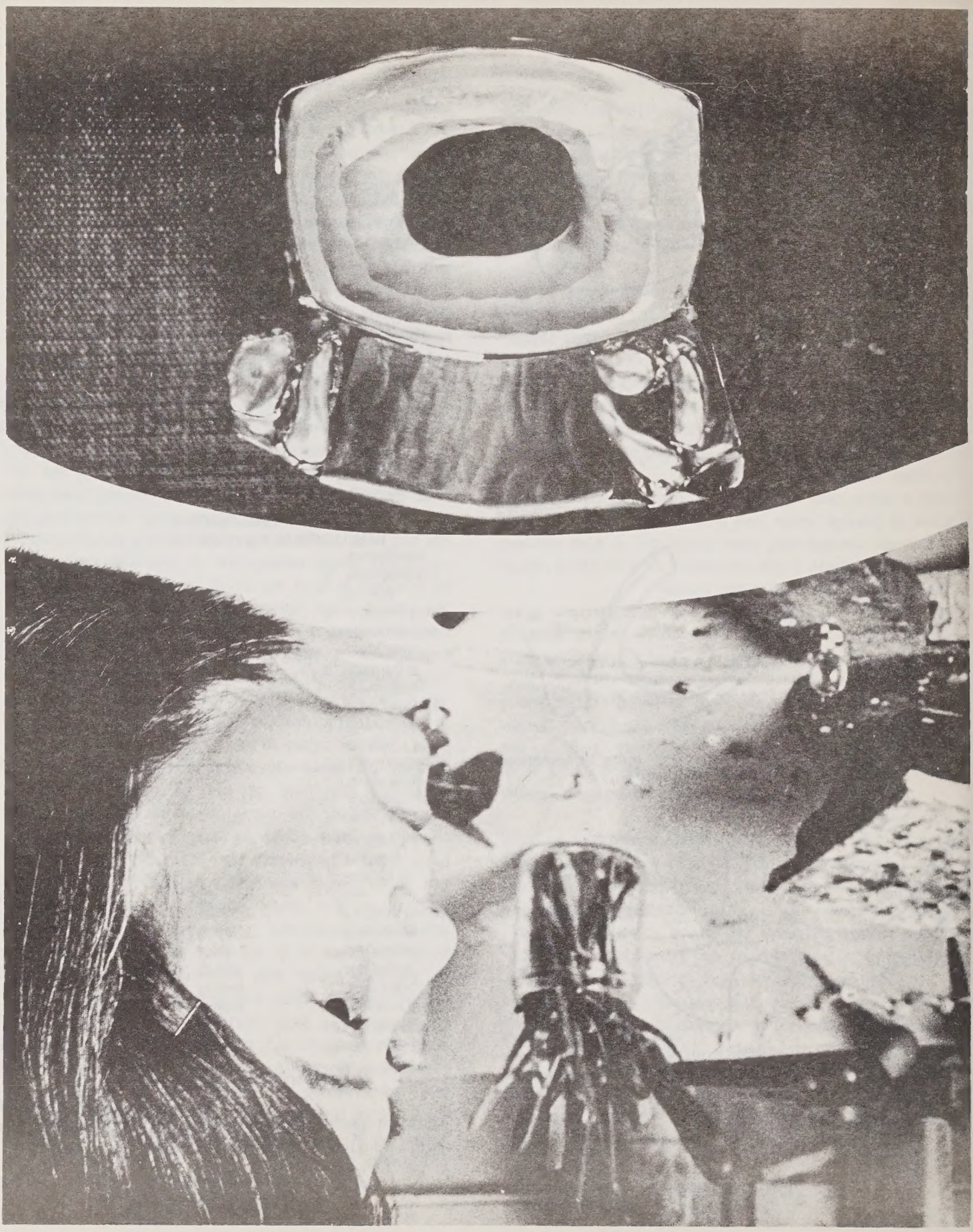
I have, in the meantime, moved from silver to silver-and-gold; 14k to 18k to 24k gold. And in the mid-60's, I shifted to colored stones and non-precious fragments from archaeological digs to get color into my work. Finally I found still more color in enamels.

I am happy about enamels because I seem to have come back to my early studies of painters and their struggle to express color and light. I have been able to broaden the radius of my thought to include Turkish miniatures and to enjoy biographies of Van Gogh and Monet, both of whom were in a no-man's land similar to mine.

The amazing part of each new step I have taken is that it has come about when financially I was in a bind and I said to myself, "It's about time to search for a new path".



MIYE MATSUKATA
and her work



## SHELL STRUCTURES

by Heikki Seppa

How the "shell structure" is a part of metal-smithing, and how it fits into the total technical experience.

Three Categorical Activities:

**FORMING**

Structural Forming
1. Forging
2. Casting
3. El. Forming
4. Filigre
5. Raising
6. Spinning
7. Reductive Methods
   -Sawing & Drilling
   -Filing & Grinding
   -Cutting & Chiseling
   -Lathing & Planing
8. Shell Structure

**JOINING**

1. Solder
2. Rivets
3. Braze
4. Fuse
5. Weld

**SURFACE EMBELLISHMENTS**

1. Surface Refinement by:
   -Abrasives
   -Burnishers
   -Planishing
   -Particle Blasting
   -Plating & Etching
   -Other Chemicals
2. Engraving & Scratching
3. Lamination & Inlay
4. Granulation
5. Roll Printing, Emobssing
6. Chasing & Replusse
7. Reticulation
8. Applied Metallic and
9. Non-Metallic Substances

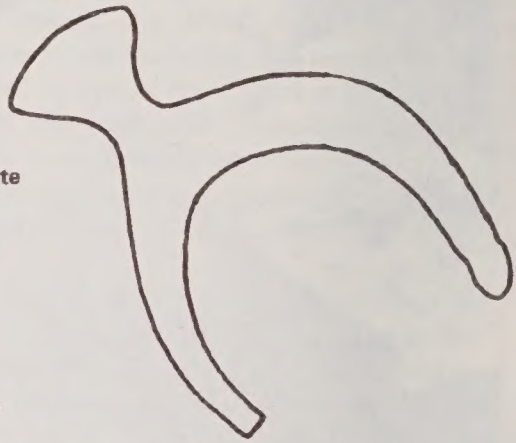
**AUXILIARY STRUCTURAL TECHNIQUES**

Hinges, Locks, Catches, Linking, Gem Settings, Kinetic Mechanical Applications.

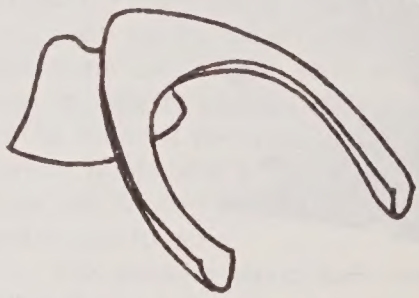
Transformation of form from the primal, flat satate to the 3-dimensional, structured whole:

| | |
|---|---|
| **Cut-Out Primal State.** Limited to flat planes, mono bends, twists and prismoidal structures. | Simple Planes or Mono Curves. |
| **Mesomorphic State.** Metastasized to the limits of metal's plasticity and strength (State of Half Sheet-Half Structure) | Anticlastic & Synclastic surfaces. Compound curves. 3-dimensional. |
| **Paramorphic State.** Structure is solidified by joining with another shell (The Deck) | 3-Dimensional structures. |
| **Structural Whole** is solidified after each cut to maintain the structural whole of each piece. | Divisible to multifid forms. Structure and form propagation. |

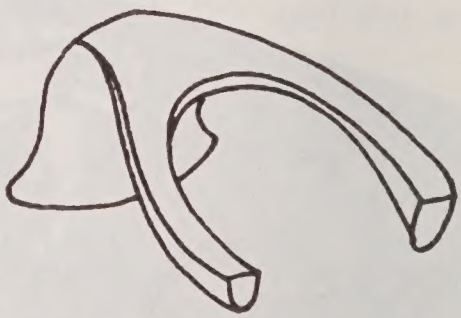
**Cut-Out Primal State**



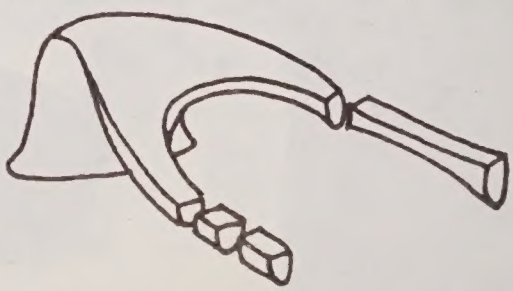
**Mesomorphic State**



**Paramorphic State**



**Structural Whole**



## BOB EBENDORF

My introduction to jewelry making was in high school, as a member of that general crafts class that always seems to be filled with "hard-to-teach" students. I made the typical copper pin and other small copper forms. I had a teacher who encouraged me. She saw that I had an interest in metalwork and she wanted to develop that interest.

During my senior year in high school I participated in a field trip to the University of Kansas, which is not far from my home town of Topeka. I spent the afternoon in the university art department, watching students at work. After that visit I was more than just interested in jewelry. I went on to earn a B.F.A. degree from the university in the area of gold- and silversmithing.

In graduate school I studied three-dimensional design as it related to crafts, and took as many gold- and silversmithing courses as I could. Though the university design department gave me a good understanding of basic design and drawing, I realized I needed more experience in dealing directly with metals. After completing my M.F.A., I was fortunate enough to receive a Fulbright grant, which enabled me to study in Norway for a year at the State School for Applied Arts and Crafts.

In Norway I learned many new ways of working with metals and new materials. I also learned how to handle tools and how to take care of them, and a great deal about the importance of precision in gold- and silversmithing.

Sometime later I was awarded a Louis Comfort Tiffany grant, and I returned to Norway. This time I worked in a small production studio and was exposed to the kind of thinking, work habits, and basic methods that are part of such an operation. For one year all I did was file and solder, file and solder. This experience taught me a lot about how to make a living from my craft, if I ever might want to live entirely from my work.

I learned, too, about making mass-produced jewelry. In a university atmosphere a student can design and make the kind of forms he wants, without caring about whether they will sell. He makes a form because he believes in it. But there is a different audience outside the university, with different demands. A craftsman must realize who this audience is and how to deal with it.

I would like to share with you part of a letter I got not so long ago from Oppi Untrachi. In the letter we were talking about the students who have gone out of the university and college metal programs and the realities of working at the bench or for some other goldsmith. In this situation a student was working in Finland's biggest and newest gold and silver factory. "Bob, your eyes would open wide if you saw this place and also the marvelous factory of Kalevala Koru, and Lapponia. These are picture book factories with all facilities for workers and marvelous workshops. This alone is worth a visit to Finland for any metal worker or jeweler. These are not small workshops where goldsmiths piddle away their time with dreams and ways of satisfying their egos. They are down to earth production places. I am not against the individual jeweler, that would be ridiculous. But I do feel that he should get over the idea of his super-ego specialness. So many I know have hit their noses to the floor once they get out of the protected atmosphere of the university workshop. They cannot have the realities and that is what Finnish Jewelry is all about." Only now after the experience of work in the small production can I understand what Oppi is saying. It would be good if the young metal student could experience both ways of working as they are going through the college and university metal experience. In this way they would see and experience a fuller educational background.

I've learned much about form, metal, and the uses of materials by going to museums; they have been like research centers for me. I can see the heritage the goldsmiths and silversmiths have handed down, and I feel I'm part of it. It surprises me that today I'm using many of the same tools and some of the same techniques that were used in the Middle Ages. Going to museums has thus helped me better understand what early craftsmen did, and I've learned how to use their techniques in my work.

When I first started working in metals all I thought of was soldering. I thought of it as the only was to hold things together permanently. I had learned in Norway how to solder well, and how to construct. But sometimes one doesn't have the money to go out and buy all the necessary equipment, so I began to think of a new way of working—using cold connections, which means putting pieces together not with solder, but with rivets, nuts and bolts, and sleeve fittings, or even by folding a piece

of metal against itself. For instance, tinsmiths and people who do metalwork for heating and air-conditioning companies take large sheets of thin metal; by putting a crease here and a bend there they can establish a strong structural piece of metal.

I find that now I'm using a combination of solder techniques and cold connections, and this has opened up new possibilities in constructing pieces. Delicate work can be done where soldering isn't possible, but putting pieces together with sleeve fittings or carefully working with rivets. This method offers the added advantage of working with materials that will not tolerate heat.

At one time I worked only in silver. Now I've gotten away from a purist attitude. If I think a piece of Plexiglass will work in the design of a piece, I'll use it. I don't think it's an injustice to combine different materials.

For the past few years my work has dealt primarily with surface enrichment. It's a very direct kind of involvement with the metal—in manipulation of the materials. And it doesn't require a lot of equipment. I can relate this to African cultures and the direct metal they use in their jewelry. The Africans use hammers and simple hand tools without power equipment. I do engraving, score into the metal, use chasing tools for embellishing the metal, use the saw blade graphically to cut into the metal and obtain negative and positive space relationships. Often I take a sharp scribe and just draw directly on the surface. For me, this directness is rich!

I find that I don't use buffers and polishing machines much any more. I seldom put a high finish on a work. The polishing I'm doing now is by hand: scraping and burnishing. I think that many people go through changes in individual technical processes. I certainly have! I have gone from high polishes to matte finishes to sandblast finishes. Hopefully I am always open to new directions and continually moving into areas that are new for me.

# snag news

NOTE: Mark and Lynda Baldridge shall be moving to a new address as of May 1. Therefore, all future mail should be mailed either to Longwood College or 1600 Otterdale Rd., Midlothian, Va., 23113. A new phone number has yet to be assigned.

Because of the increased interest of some SNAG members who wish to receive their newsletter faster, the newsletter will provide an alternate service. For those who would like their newsletter mailed first class, send to the Editor two postage stamps per copy. Please do not send stamps for more than 5 issues ahead, for obvious reasons.

**If you would like to join SNAG as an associate member, simply send a check for $10 to SNAG, P.O. Box 247, University Station, Boston, Mass., 02215. If you are interested in becoming a full member (annual dues $100), the next due date for applications is April 30. You must send 20 slides of your work in a plastic file folio, along with your professional resume to Jim Meyer, 11713 S. Briarpatch, Midlothian, Va. 23113.**

LETTER FROM MARCIA LEWIS:

". . .But I also wanted the newsletter to ask SNAG members their feelings about the letters being sent to us THREATENING us with being made 'inactive' if we don't pay up one hundred dollars by June 30!!! I for one do my best for SNAG, but what of the younger, less established people who hold that much money dearer than the settled and senior members? Instead of threatening. . .asking for an explanation and understanding would get us farther."

# new members

We would like to welcome the following new members to SNAG:

FULL MEMBER – George Van Duinwyk.

ASSOCIATE MEMBERS – Norman Taylor, III, A.I.S., 9301 Indian School Rd., N.E., Albuquerque, N.M., 87112; Richard Wagner, 509 Overbrook Rd., Baltimore, Md., 21212; Pat McCrary, 2708 Southwest Freeway, Houston, Tex., 77006; Prof. Helen Worrall, 10808 Chesire Dr., Cincinnati, Ohio, 45242; Allen Williams, El Dorado Sales, Suite 7205, 4331 Lake Washington Blvd., N.E., Kirkland, Wash., 98033; Margaret Fischer, 4360 Northfield Rd., Warrensville Heights, Ohio, 44128; Ruth Goodman, 3608 Blair Ave., Randallstown, Md., 21133; Greg Harness, 811 North Fifth, Garden City, Kan., 67846; Pauline Warg, 135 Market St., Portsmouth, N.H., 03801; Katie Cleaner, 334 Main St., Bennington, Vt., 05201; Susan Cohan, Peters Valley Craftsman, Star Route, Layton, N.J., 07851; Elizabeth Keating, 2668 Berkshire Rd., Cleveland Hgts, Ohio, 44106; Jean Ridgley Dampel, 2900 35th St., Des Moines, Iowa, 50310; Pahaka, 19 Fox Hill, Upper Saddle River, N.J., 07458.

# letters

I am really a Johnny-come-lately to the field of gold and silversmithing considering that I made my first piece (a silver candy dish) at the tender age of 31. That was during my second year in graduate school at the University of Iowa. I had gone there to get an MFA in Sculpture after getting the London University Diploma in it four years earlier. But I was turned off by the direction in which sculpture was going. I wanted to make beautiful things and sculpture in those days could be dramatic, stunning, etc., but not beautiful. So I switched majors and became the first MFA in Silversmithing from the University of Iowa.

Twenty-two years and over 500 designs later, I still think it was a good decision. I have done just what I wanted to do, enjoyed myself and got paid for it. Much of the fun, apart from doing the work, was in solving problems for my clients, seeing their faces light up when I delivered the work, and knowing that I had added just a little more to the world of Gold and Silversmithing.

My work extends all the way from fine jewelry with precious stones to repousse wall sculpture on the side of a building. Of course there are the usual sugar bowl-creamer sets, candle sticks, necklaces, etc. But most of my work, especially the major pieces, are in the religious and ceremonial field. This is the field of art I enjoy most. You have to bring to it not only all your ability as an artist and a craftsman, but you have to understand the significance and the background of the piece you are making and how it will be used. Then you can also tell stories, and I like telling stories in my work. One field which I found especially fascinating was that of university maces and chains of office. To date I have made 5 of each. Quite often the symbolic forms used will determine the shape of the piece.

Another area of special interest to me is the history of goldsmithing. It gives us an idea what a great and fine art it used to be and establishes without a doubt that only the most able artists of the past were capable of being master goldsmiths, because when practiced at the highest levels it requires far more knowledge, skill, artistic ability and intelligence than any other art form.

As for technical innovation, I have stayed away from it almost completely. The technical vocabulary already available to the contemporary goldsmith is so enormous that I have never been at a loss to say in my work what I wanted to say. If we look at the greatest artists of the past very few invented new techniques. Donatello, Ghiberti, Michelangelo, Raphael, Giorgione, Titian, Rubens, Matisse, Klee, and in our field, Francois Germain, Paul De Lamerie, and Paul Storr didn't invent any.

Much of my time is of course taken up by teaching and in the 18 years that I have been at New Paltz (after a pleasant two years at Kansas State University) we have gone from an eight-week session with students to a BFA and MFA major in Gold and Silversmithing where we are now offering a total of 57 semester credits. With Bob Ebendorf's valuable cooperation we are now teaching a large and busy group of highly committed students. I enjoy teaching enormously. To me it is an extension of my own creativity and a sharing of many of the insights that I have gained over the years. I consider teaching one of the most responsible of the professions, because on how we do our job will depend the level of performance of generations to come. I certainly do not subscribe to the old saw that "those who can do, those who can't teach." How can you teach something competently if you are not competent in it yourself?

As for the future of creative gold and silversmithing, I believe it looks rosy indeed, simply because the public needs us. People have an innate desire to adorn themselves which is a boon to the jewelers. People also have a need for celebrating events in their daily lives or in their society and its organizations. That is when they often turn to the silversmiths for personal, ritual or ceremonial implements. I think it important though to bear in mind that for many people our work is an investment from which they hope to derive years of pleasure. Therefore, I find it important that our work is meaningful and appealing to the public (without compromising our artistic integrity!) and I also try to make my pieces as timeless as I can rather than take part in current fads.

As professional goldsmiths, we must have a highly developed sense of quality and value. Perhaps in a time when values everyone used to take for granted have been badly eroded, we can, through our work, help in their restoration.

Kurt J. Matzdorf
Professor of Gold and Silversmithing
State University College, New Paltz, N.Y.

Dear Editor:

The urge to communicate is unbearable—just devoured the Feb. 1 newsletter.

I have been working in metal nearly every day of my life since I first discovered it four years ago. Now I live and work hermit-like in the woods in an unheated studio with no running water. It is crazy, my work goes on all by itself, up — down, up — down. It's growing.

It has a strong sense of unreality to me . . . I know no other metalworkers. I never get to discuss it and am starved for the vocabulary. Sometimes when I'm on an up I get so one-tracked that when we visit neighbors who discuss t.v. and skiing, I am utterly bored. Other times I look closely at my cat and find it so beautifully made I can't work. Maybe I am losing it completely.

It bothers me to see metalworking put on a technique pedestal. At its best, it's true art, with genius and inspiration. At its worst, you might as well be a typist. The great goldsmiths of Europe were the most respected of craftsmen. Painters and architects trained first in the craft because it was so exacting, but they were all copiers. Designs were circulated and everyone worked in the style of the period. Now it's different.

Jewelry is the most ancient of all crafts. It has mystique, challenge, endless possibilities, and a constant audience. We can keep on making developments in techniques until we are all engineers, making our work so sophisticated that only

others in the field can appreciate it. But technique is nothing without design. A good piece is universally recognizable, despite technique, not because of it.

I work for those flashes when your style jumps off to a new plateau under your hands. Those instants of clarity when time stops and newness begins. I wish I were getting known or making more money, but I do it anyway – just for those feelings.

In the endless turn-out of small sculptures and wearable pieces, some really stand out. If any piece of mine is "good", it is because somehow that energy flash got trapped forever in my silver and is subconsciously recognized by others.

I really appreciate the views of everybody published in Feb. I hope someone enjoys mine.

"The Hermit", Jane Campbell

## NOTES ON CENTRIFUGAL CASTING

In response to the SNAG Newsletter questionnaire about centrifugal casting, I am sending along this outline on the process which I hope may be of use. There's a lot of conflicting information about this subject and after trying many different methods from many different sources, I tried to boil it all down and come up with a method suitable for teaching casting in a school situation where the equipment is quite minimal, out of date, and not always in the best condition. It seemed important to be able to achieve a high success rate and to provide a guide which was straightforward so that it would be easy to determine where errors had occurred, in the case of a failure. I've been using this method for a couple of years in a teaching situation with a very low failure rate – any failures have been easy to pinpoint and correct and have always been due to not following this guide. In addition to the usual craftsman's reference works on the subject, I am indebted to Larry Marsh, J. Fred Woell, and several professional commercial casters here in the Providence area who were very cooperative in allowing me to pick their brains. I have tried to use their "language" throughout this guide. (Ed. note: 3 pages casting notes eliminated.)

After all this, I would like to mention that, if you are unable to make this information available through the SNAG Newsletter, I am willing to provide copies for $1.00 each to cover the cost of xeroxing, postage, and running around. I also have information on setting up an electroforming facility at very modest cost. I have access to a really outstanding professional caster in this area who is reticent about taking on a lot of new work. He does the best work I've seen and is very reasonable. He does one-of-a-kind and small production work, beautiful rubber mold work, and will do metal molds if the models are properly drafted (metal molds are great—virtually NO shrinkage). He charges 50 cents to $1.00 wax and casting charge for smaller things plus his metal cost. Rubber molds run $2.50 to $5.00. Although he isn't seeking any publicity, I will provide his name and address to seriously interested members of SNAG upon receipt of a stamped, self-addressed envelope.

I hope all of this will be of interest.

Peter Blodgett
72½ John St., Providence, R.I., 02906
phone: 401/272-3446

Dear Editor,

As an introduction, my name is Chris Hentz. I am one of Professor Robert Montgomery's former students at Indiana State. . .currently enrolled at Cranbrook Academy of Art. . . to graduate in May.

I am happy to see the changes which have taken place in the priorities of SNAG. From reading the newsletter I feel the organization is making positive progress in the ways of upgrading and informing the American Metalsmith. . .

Christopher A. Hentz

Dear Bob Ebendorf,

Thanks for sending me the copy of Golddust. Actually I have been receiving copies for the last couple of months. I really enjoy the paper and find it extremely helpful. I'm still anxiously awaiting the answer to the firescale question from a while back. If you are the one who added my name to the list, thanks again. I will send in the $10 as soon as I can spare it.

I am enclosing my slides for the SNAG jurying. In looking at names mentioned in the newsletter, and being familiar with the work of some of them, I guess I have a long way to go and lots more solder joints before I'm ready for SNAG.

Jane Ferree
Box 3, Blowing Rock, N.C., 28605

Dear Editor,

Re: The Aesthetics of Prostitution

Throughout history metalsmiths have exchanged their services for money, but I would not view the history of metalsmithing as a history of prostitution. Money is not inherently evil, though an intense preoccupation with money is. The artist lives in the material world just like everyone else. It is best, therefore, to concentrate fully on your art while you are making it and to concentrate fully on selling it when you have finished the piece. This method seems to work in actual practice.

Tom Baker

## OBSERVATIONS FROM FINLAND, 1976

The 4½ million population of Europe's 5th largest country, Finland, has a prolific record for artists. A similar land area with the same population in the U.S. is seldom capable of turning out writers, musicians, architects and craftsmen of the same world renown caliber as Finland. Finland has been cultivating a very fertile soil for her artists; there has been a steady growth of skilled craftsmen without any creative ambitions as well. With the strength of this work force the creative craftsmen have saved a lot of time in the actual execution of designs. They can "farm" their designs to their skilled friends who in many cases can solve a host of practical problems in which the designing artist is less familiar.

Commercial reasons are often behind Finnish artists' growth. This is a natural course of events. There are very few,

if any, designer craftsmen who are not affiliated with a manufacturing concern. Likewise, there are no one-of-a-kind pieces for sale. Small editions — yes, but genuinely one-of-a-kind pieces are not to be found on the dealers' shelves. In the U.S., one-of-a-kind metalwork is found in many places. The U.S. craftsman does not have access to extensive reproductive machinery and factory facilities. This is actually a blessing because the money-making motivation is checked and more one-of-a-kind inventive designs, although at the risk of diminishing craftsmanship, are created.

This leads to a philosophical question: Does personal art mean different things to Europeans than Americans? Are Americans more materialistic than Europeans? From some evidence it would appear that a popular myth of Americans being materialistic is in error. Give a European an appliance, an auto or a lump of money and they will mother the appliance and keep it till they die. They'll wash and polish their car and go to war to prove its worth. They will also save the money and live in poverty. This is the same in buying jewelry. They will buy proven, well-made jewelry; modern — but terribly sound. What is this but selling one's soul to inanimate objects. Americans can buy something and when it fails, it is not a big deal, they buy a new one. No soul is sold. This is, of course, over simplification, but may have something to do with the preferences in our selection of personal art.

In socialistic countries, where individualism is supposed to be a vice and should be supressed, they still cannot get away from the strong call to recognize an individual and his effort. Very curiously the individual is given something for his singular effort, they give him medals and ribbons, and thus, in a way, say that he is better than the next person. Would it be fair to suggest that if a person is right in selecting a one-of-a-kind piece to be used by a one-of-a-kind person, then there should be only unique pieces for sale. Naturally, that time is far away and might never come. But at the same time, our observations are that America is closest to this ideal than any other western country.

Finnish people are still buying a lot of metalsmithing, but most of the precious metal products are for export. There is an old, respected firm whose medal production, one of the finest in the world, goes mainly to the Soviet Union. Finland can support a good ancillary skilled work force to the main gold and silversmithing trade. There is a strong engraver's society, enamelers, casters, metalfinishers, stonesetters, lapidarist, and some even specialize in selling and preparation of various chemicals for the trade.

I could not help but reflect to the times of Carl Faberge in St. Petersburg (now Leningrad). He almost single-handedly maintained and gave work to about 700 various metalsmithing specialists in a period of great growth and prosperity. This of course was before the revolution in the Soviet Union.

The government-controlled stamping regulations keep hampering some metal possibilities in Finland. Marriage of metals is almost impossible. Mokume is impossible. There are some exceptions, but generally the law states that all precious metals must be stamped. This leaves very little room to speculate on the multi-metal use, because in the course of examination for purity the government assay officer takes a scraping sample from each piece. After his tests prove the purity, the stamp is then affixed on the piece. If the purity is found wanting, the piece is destroyed. Soldering of different metals to a stamped piece is forbidden by the law.

The Finnish designers, although apparently free to design whatever they please, are under an obligation of a sort to design saleable work. Some have negotiated different conditions for themselves and thus can use the factory facilities to carry on a speculative, experimental work program, but they seldom sell their own work.

In the U.S. we are free to design and make anything. It would be befitting for us to remember that this country is still large enough and rich enough to afford this splendid exercise for human creative spirit, makers and buyers.

A small fish in a big pond may sometimes go hungry, but he will never be bored.

Heikki Seppa

# nuggets

I regret to say that Magic Circle Corp. and Studio 714 are no longer able to help answer questions, as they have dropped out of the program. Anyone wanting color samples and descriptive information on our present line of casting alloys, write in, NO CHARGE. Write: El Dorado Sales, Suite 7205, 4331 Lake Washington Blvd., N.E., Kirkland, Wa., 98033.

Art Blacksmithing Association of North America is holding a blacksmithing convention Oct. 13-16, 1976, at Southern Illinois University. For further information write the conference coordinator—Daryl Meier, University Museum and Art Gallery, Home Economics Bldg., Southern Illinois University, Carbondale, Illinois. 62901.

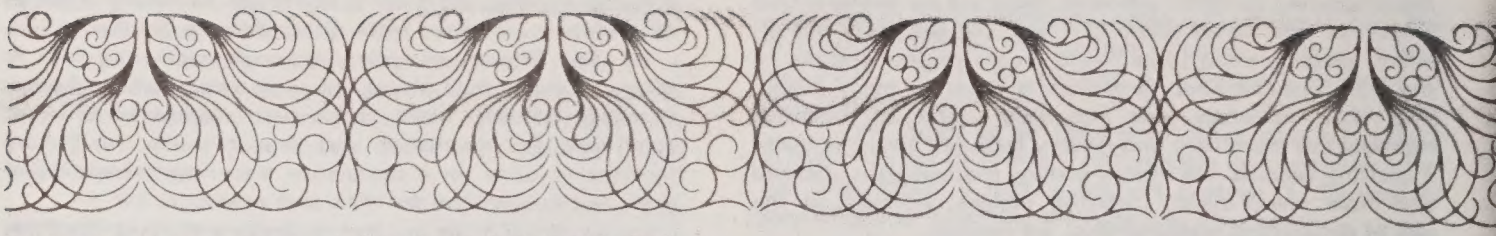
### COPPER BRACELETS CAN HELP ARTHRITIS!!!???

Dr. Helmar Dollwet, an assistant biology professor at the University of Akron, says that his research shows copper bracelets actually may help ease the pain of arthritis and rheumatism. His theory is that the copper reacts with a chemical produced by skin, methionine, to produce an anesthetic, ethylene, that can be absorbed by the body and circulated by blood.

### THOUGHT OF THE ISSUE

"Even though the workman's benefits are nonexistent (no medical insurance, no paid vacations) and the 'system' at times seems to be set on crushing the small businessman, I'm a craftsman. Freedom is why. Freedom to work when I want and on what I want. Freedom to play many roles: artist, chemist, laborer, salesman. The freedom of feeling in control of one's being and direction. I don't put in a nine-to-five day and then go home to lead a second life. My craft is my life-style; to me an 18-hour kiln firing is not overtime; a crafts fair is a vacation."

Joseph Mannio
quoted in *Craft Multiples* published by the Smithsonian



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